***UK&ITA LSR – Two-run-average (2-R-A) WORLD Land Speed Records.***

***UK and International Timing Adjudication (UK&ITA) 2-R-A WORLD*** land speed records will continue to be challenged in 2025, when the two-part ‘Speed Week’ is being held on runway 2 – 6 of Elvington Airfield, near York. The four-day “part 1” is scheduled for May 22nd to 25th. The three-day “part 2” is scheduled for September 19th to 21st.

There will be two further land speed record events, in June and September 2025, to be hosted on Campbeltown Airfield Runway 2 – 9 on the Kintyre peninsula in Scotland. [This location is also known as Machrihanish, which is the closest habitation]. These will be two-day weekend speed events on the 21st and 22nd June and the 6th and 7th September.

*These* ***2-R-A World land speed records*** *are the pinnacle of achievement in Straightliners speed sport. The Speed Record Club (SRC) will ensure that the heritage of speed records and all current UK&ITA record speeds are maintained in a written format that preserves the statistics of records – the “who, what with, when and where”.*

[There is a separate document produced for drivers and riders of vehicles that are attempting or have achieved ***UK&ITA National 2-R-A Land Speed Records.*** There is a separate document for all types of thrust powered vehicles (non wheeldriven bikes, karts and cars].

The attempts on ***WORLD*** records from UK&ITA over the short distances on tarmac, called ***UK&ITA WORLD - 2-R-A-T records*,** will be made on the tarmac and concrete of Elvington Airfield Runway 2 - 6 near York, England and the tarmac and concrete of Campbeltown Airfield Runway 2 - 9, Kintyre, Scotland.

Each course location has been professionally surveyed to ensure that there is no assistance from the gradient of the land. Wind assistance is prevented by measurement of speed in the direction of travel of vehicles (west to east), which if too high will see a halt called to record passes, or runs.

Drivers and riders are encouraged to make use of Straightliners Top Speed Test Days that are held on the runway of Elvington Airfield, in March, April, June, July and August 2025 to get ‘up to speed’.

GUINNESS World Records (GWR) speed record contenders, with vehicles which have sometimes been called ‘unusual’, who have registered their speed attempt with that company, will be welcomed by UK&ITA. Operating to the specific guidelines each registered contender will have received in print from GWR, they are encouraged to enter Elvington Events on Monday 16th June, Monday 14th July and Monday 4th August in 2025.

*All record breaking can be weather (and in particular wind and rain) affected. Running of any LSR event will be halted by event Officials, if the conditions are deemed unsafe.*

Riders and drivers will need to provide printed results or timing ticket as evidence that they are competent with the vehicle which they will use for their World land speed record attempt(s). Observed running, on sighting passes, may be possible at the commencement of the running day.

The UK&ITA will produce two WORLD LSR listings - for solid artificial surfaces (tarmac runway) and for natural surfaces (tidal sand beach). These will be known as *UK&ITA WORLD-2–R–A-T* and *UK&ITA WORLD-2–R–A-S* land speed records*.*

**Short Distance UK&ITA WORLD 2-R-A-T WORLD Land Records (© UK&ITA 2021/2).**

The WORLD speed records are available to an entrant of a solo bike; sidecar - rider with ballast weight; scooter; moped; trike; quad bike; wheeldriven car; kart; car or special automobile, for a range of cubic capacity and weight classes. The different types of vehicle categories are as follows:

**Vehicle categories I to VII by name and the classes by cubic capacity or by vehicle weight**

**I**

**Solo two wheeled motorcycle, single track, maximum of two engines:**

(***all*** configurations and body styles are permitted).

**A**. 50; 100; 125; 175; 250; 350; 500; 750; 1000; 1350; 1500; 1650; 2000; 3000, unlimited capacity.

**B**. Electric; **C**. Gas turbine; **D**. Thrust– non wheeldriven (Jet **J** or Rocket **R**)

[Unladen weight:] up to 150kg; over 150 and up to 300kg; over 300kg

**II**

**Sidecars, two tracks (front wheel ‘covered’ by rear wheel). 60kg ballast fixed on sidecar.**

**A**. 250; 350; 500; 750; 1000; 1350 capacity.

**B.** Electric;

[Unladen weight:] up to 150kg; over 150 and up to 300kg; over300kg

**III**

**Scooters and Mopeds: automatic and geared**

**A2 Scooters**: 50; 100; 175; 250; 300; 500 (geared only); 800 (automatic only) capacity.

**A3 Moped:** 50 capacity.

**B**. Electric;

[Unladen weight:] up to 150kg; over 150 and up to 300kg; over 300kg

**IV**

**Cyclecars and Trikes (three wheeled, three track motorcycles – rider only carried)**

**A**. 250; 350; 500; 600; 750; 1000; 1350; 1500; 1650; 2000; 3000; 4000 capacity.

**B**. Electric; **C**. Gas turbine;

[Unladen weight]: up to 150kg; over 150 and up to 300kg; over 300 and up to 500kg; over 500kg

**V**

**Quad bikes, single engine driving the rear wheels**

**A**. 250; 350; 500; 600; 750; 1000; 1350; 1500 capacity.

**B**. Electric; **C**. Gas turbine;

[Unladen weight:] up to 150kg; over 150 and up to 300kg; over 300 and up to 500kg;

over 750kg.

**VI**

**Cars or special automobiles, wheeldriven, four or more wheels, maximum of two engines.**

**A**. 100; 125; 175; 250; 350; 500; 1000; 1500; 2000; 3000; 4000; 5000; 6000; 7000; 8000; 10000; over 10000cc.

**B**. Electric; **C**. Gas turbine; **D**. Thrust – non wheeldriven (Jet **J** or Rocket **R**)

 [Unladen weight, maximum] 500kg; 1000kg; 1500kg; 2000kg; 2500kg; 3000kg; 3500kg; 4000kg; 4500kg; 5000kg; over 5000kg

**VII.**

**Karts, includes Historic, Classic, Circuit, Diesel and ‘Drag’, single engine driving rear wheels**

**A**. 100; 125; 175; 250; 500; 1000 cc; 1300cc.

**B**. Electric; **C**. Gas Turbine; **D**. Thrust propelled – non wheeldriven (Jet **J** or Rocket **R)**

[Unladen weight:] up to 300kg; over 300 and up to 500kg; over 500 and up to 750kg.

Riders and drivers must ensure that they enter the vehicle they are using at an event in the correct class. The cubic capacity of any and all internal combustion engine(s) *may* be checked by a technical official immediately after a record attempt has been made, or a seal could be applied to the power unit by a technical official to allow for inspection at a later, agreed, date.

The single object sidecar ballast will be checked for weight (132lb, 60kg) and for the security of fixing.

Where classes are defined by “unladen weight”, a printed and dated weighbridge ticket could suffice to confirm the correct class has been entered. A technical official *may* accompany an entrant to a weighbridge for weight checking purposes.

Vehicles may use natural aspiration or forced induction. Most fuel types are acceptable including methanol, nitromethane, nitrous oxide injection, octane booster, hydrogen, LPG, all for use in reciprocating 2 and 4 stroke engines, diesel cycle or rotary engines.

**Thrust powered vehicles** may be entered for any event. The time at which such ‘noisy’ vehicles can be operated will be stated in event Supplementary Regulations and confirmed at the morning competitors briefing.

The organisers will recognise average speeds or times for an EV or for Thrust propelled vehicle within a period of 120 minutes.

*It is the thrust vehicle team’s responsibility to arrange for any necessary training sessions for the fire and rescue teams.*

*Training and safety equipment needs will depend on the fuel used and the hazards presented. These should be specified in the entrant’s vehicle Safety Plan.*

*When vehicles are using unconventional fuels or liquid oxidiser (for example high test peroxide (HTP)), the fire and rescue personnel must be trained by the vehicle owner and then equipped to deal with such components being used.*

**NO** pulse jet power units. **NO** Solid fuel rockets. **NO** bi-propellant systems; **NO** hypergolic rocket fuels.

The listed **WORLD land speed records** will be timed to give two run average (***2-R-A***) speeds or elapsed times, for the following standing start, flying start and top speed distances (where a speed trap is installed). Each pass, or timed run, is made in the same direction, usually from west to east.

Timed distances – from the startline and starting ‘wand’.

Imperial Standing start 1/8-mile elapsed time

 Standing start 1/4-mile elapsed time

 Standing start 1/2-mile elapsed time

 Standing start 1-mile elapsed time

Standing start 1.25-mile elapsed time

1/2-mile speed trap top speed

 1 mile speed trap top speed

1.25-mile speed trap top speed

 Flying start 1/4-mile average speed

 Flying start 1/8-mile average speed

 Flying start 1/2-mile average speed

Metric Standing start 100 m elapsed time

 Standing start 250 m elapsed time

 Standing start 500 m elapsed time

 Standing start 1 km elapsed time

 Standing start 2 km elapsed time

500 m speed trap top speed

 1 km speed trap top speed

 2 km speed trap top speed

 Flying start 100 m average speed

 Flying start 250 m average speed

Flying start 500 m average speed

Flying start 1 kilometre average speed

On airfield runways no track surface preparation will be carried out, although the surface will be swept to remove any foreign object debris (FOD). Burnouts and tyre spinning will **NOT** be permitted by vehicles when moving to the start area or made across the starting line. A burnout ‘box’ *may* be positioned by the organisers for tyre warming, where burnouts shall last no more than 5 seconds. Electric tyre warming blankets may be used in the pre-stage paddocks.

***UK&ITA – WORLD-2-R-A-T*** records are the average time or speed of (any) two passes, or runs, made by a Straightliners member, within a period not exceeding sixty minutes. (EV and Thrust power vehicles will have a 120 minute period). All competitors shall be Straightliners Club Members and shall be registered with the Club as a rider or driver for their nominated competition vehicle.

All timing starts from the movement in the ‘wand’ and then from the breaking of the across track timing beams. For attempts on the standing start records, bikes and other vehicles will be positioned against the timing ‘wand’ at the start line by an official of the event. Vehicles may be fitted with a vertical timing strut.

**Establishing** a ***UK&ITA – WORLD-2-R-A-T*** short distance record occurs when no elapsed time or flying speed or top speed has been recorded in the class. A rider or driver may obtain a UK&ITA World land speed record at the conclusion of the event day, provided the rider or driver makes two satisfactory passes or runs within sixty minutes (EV and Thrust 120 minutes), where the two times or two speeds will be averaged.

**UK&ITA WORLD 2-R-A-T RECORDS will need to be quicker or faster than any existing cubic capacity or weight class UK&ITA NATIONAL 2-R-A-T record, which will have been printed in the Record Book or are included on any updated listing.**

The quickest or fastest of each class entry at the end of a particular 24hr event day may be confirmed as a ***UK&ITA WORLD-2-R-A-T land speed record holder***.

Riders or drivers may need to break an ***existing UK&ITA – WORLD-2-R-A-T* record**. A rider or driver must make their first pass, or run, which exceeds the existing WORLD record speed by 1% (speed in mph x 1.01), or is quicker than an elapsed time record using the same margin of 1% (elapsed time x 0.99). This first pass can then be averaged with any other later pass, or run, made within the allowed total time of sixty minutes (EV & Thrust vehicles will have 120 minutes).

A new land speed record will be awarded if the two-run-average is at a greater speed than an existing record by 0.001 mph and it is the best in class on a particular 24hr event day. An elapsed time record must be a lesser time by 0.001 seconds and has to be the best in a class on a particular 24hr event day.

Elements which provide vehicle motive power - the engine block; operating cylinder numbers; turbine casing; liquid or gaseous fuel type; electric motor size; battery pack configuration, and any or all parts which provide vehicle motive power, ***shall remain the same*** throughout each sixty-minute (or 120 minute) attempt.

**Any person making any major vehicle change will be required to recommence their complete bid. Vehicle bodywork and ballast weight may not be removed or altered during the time periods stated.**

Only authorised ‘service’ parts and replenishment materials can be changed on, or added to, any vehicle when work is carried out for maintenance purposes. This permitted work is to ensure vehicle safety before each powered pass, or run, which is made in the sixty minutes of the attempt (or 120 minutes where appropriate).

Vehicles will remain under official UK&ITA observation in all paddock areas and ***any attempt*** to cover or to shield a complete vehicle or part of the vehicle from view at any time could lead to immediate exclusion and the removal of speed or times from the results.

Should any vehicle exceed the event noise limit ***at any time*** during a speed record attempt that attempt will be halted by Officials until that defect is corrected and vehicle is re-approved. No time extension to the sixty minute period will be given.

Any registered entrant at the World speed record event may ***protest*** the legality of another vehicle, bike or car of the same type (category or group). A fee may be requested by UK&ITA to meet the costs of any intrusive technical inspection, or to meet the cost of any necessary technical officials meeting(s).

Any WORLD record speed or time of the vehicle under protest would remain ‘provisional’ until an outcome has been agreed and the parties involved have been informed of the decision taken by UK&ITA Officials, which will be final and binding on all. The time or speed achieved by any vehicle under protest, would however be used as the target for others to exceed for the remainder of the day or for the whole event.

**For more information or to register your interest in competing at a World speed record event please use the following contacts:**

 helen@straightliners.co.uk trevor@straightliners.co.uk malcpitt01@gmail.com

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**Straightliners & UK&ITA World 2RA Speed Records – This Version March 19th 2025**